IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MMB Docket No. **1671-0298**

J&J Reference: **DEP5256USNP**

Confirmation No. **1579**

Application of: **Hayden**

Examiner: **Richard R. Shaffer**

Serial No. **10/811,338**

Group Art Unit: **3733**

Filed: **March 26, 2004**

Title: **Navigated Pin Placement for Orthopaedic Procedures**

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March 24, 2008
Date of Signature

LETTER

Sir:

Enclosed is an Appeal Brief in connection with the above-identified patent application. The Notice of Appeal was filed on January 22, 2008, and the Appeal Brief was due two months from this date. Thus, because March 22, 2008 fell on a Saturday, this Appeal Brief is being timely filed on March 24, 2008.

A $500.00 for the filing of a Notice of Appeal as then required by 37 CFR § 41.20(b)(1) was previously paid. Since that time, the fee required by 37 CFR § 41.20(b)(1) has increased to $510.00. Accordingly, a check in the amount of $10.00 covering the increase in fee is submitted herewith. Also, please provide any further extensions of time which may be necessary and charge any fees which may be due to Deposit Account No. 13-0014, but not to include any payment of issue fees.

Respectfully submitted,

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APPEAL BRIEF

Sir:

This is an appeal under 37 CFR § 41.31 to the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office from the rejection of the claims 30-49 of the above-identified patent application. These claims were indicated as finally rejected in an Office Action dated September 21, 2007. A check in the amount of $10.00 to cover the increase in the fee required under 37 CFR § 41.20(b) (2) over the previously submitted $500.00 is included herewith. Also, please provide any extension

of time that may be necessary and charge any fees that may be due to Account No. 13-0014, but not to include any payment of issue fees.

(1) REAL PARTY IN INTEREST

DePuy Products, Inc. of Warsaw, Indiana is the assignee of this patent application, and the real party in interest.

(2) RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to this patent application (serial no. 10/811,338).

(3) STATUS OF CLAIMS

Claims 1-29 have been canceled.

Claims 30-49 are rejected.

Claims 30-49 are being appealed, and are shown in the Appendix attached to this Appeal Brief.

(4) STATUS OF AMENDMENTS

Appellant has filed no amendments after receipt of the September 21, 2007, Office Action (the "Office Action").

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to a system for the navigated placement of bone engaging elements, such as support pins used to support a cutting block on a bone for resection (See, e.g. Appellant's specification at Abstract). In accordance with one non-limiting embodiment, a guide apparatus 100 includes a body 101 that may be mounted to a bone F. (See, e.g. Appellant's specification at page 13, lines 28-29 and FIG. 8). A guide arm 105 is mounted to the body 101 and supports a position adjustment assembly 110. (See, e.g. Appellant's specification at page 14, lines 12-13 and FIG. 8).

The position adjustment assembly 110 includes a gross positioning block 115 that is supported on the guide arm 105. (See, e.g. Appellant's specification at page 16, lines 5-7 and FIG. 10). A fine adjustment mechanism 118 is located between the gross positioning block 115 and a fine adjustment block 117. (See, e.g. Appellant's specification at page 16, lines 14-15 and FIG. 10). Both the gross positioning block 115 and the fine adjustment mechanism 118 permit translation along the axis D_1. (See, e.g. Appellant's specification at page 16, lines 7-10 and 22-24 and FIGs. 8 and 10).

A second gross positioning block 115' is supported on a support arm 126 that extends from the fine adjustment block 117. (See, e.g. Appellant's specification at page 17, lines 6-8 and FIG. 10). A second fine adjustment mechanism 118' is located between the gross positioning block 115' and a fine adjustment block 117'. (See, e.g. Appellant's specification at page 17, lines 9-11 and FIG. 10). Both the gross positioning block 115' and the fine adjustment mechanism 118' permit translation along the axis D_3. (See, e.g. Appellant's specification at page 17, lines 11-13 and FIG. 10).

A vertical support arm 128, to which the pin guide 107 is mounted, is slidably mounted within the block 117' for translation along the axis D_5, which is the axis of the pin guide 107. (See, e.g. Appellant's specification at page 17, lines 15-18 and FIG. 10).

The additional information required by the United States Patent Office is as follows.

Claims 30-49

Claims 30-49 are argued together. Claims 30, 37 and 45 are independent claims. Claim 30 recites:

A system for accurately guiding placement of a bone engaging element in a bone comprising (see, e.g., Appellant's specification at Abstract):

a guide configured to guide movement of the bone engaging element toward a location on a bone (see, e.g., Appellant's specification at page 18, lines 7-10), said guide having a bore through which said bone engaging element may be advanced (see, e.g., Appellant's specification at page 18, lines 7-10 and FIG. 10), and said bore defining a first longitudinal axis(see, e.g., Appellant's specification at page 18, lines 7-10 and FIG. 10); and

a support apparatus configured to support said guide, said support apparatus including (see, e.g., Appellant's specification at page 13, lines 26-28 and FIG. 8);

a support body mountable to the bone (see, e.g., Appellant's specification at page 13, lines 26-28 and FIG. 8);

an arm extending from said support body (see, e.g., Appellant's specification at page 14, lines 3-5 and FIG. 8); and

a position adjustment assembly supported on said arm (see, e.g., Appellant's specification at page 14, lines 12-13 and FIG. 8), said position adjustment assembly including (i) a first gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said support body along a second longitudinal axis (See, e.g. Appellant's specification at page 16, lines 5-7 and FIG. 10), (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said support body along said second longitudinal axis (See, e.g. Appellant's specification at page 16, lines 14-15 and FIG. 10), (iii) a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said support body along a third longitudinal axis (See, e.g. Appellant's specification at page 17, lines 6-8 and FIG. 10), (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said support body along said third longitudinal axis (See, e.g. Appellant's specification at page 17, lines 9-11 and FIG. 10), and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said support body along said first longitudinal axis (See, e.g. Appellant's specification at page 17, lines 15-18 and FIG. 10),

wherein said first longitudinal axis is not coincident with said second longitudinal axis (See, e.g. Appellant's specification at FIG. 10),

wherein said first longitudinal axis is not coincident with said third longitudinal axis (See, e.g. Appellant's specification at FIG. 10), and

wherein said second longitudinal axis is not coincident with said third longitudinal axis (See, e.g. Appellant's specification at FIG. 10).

Claim 37 recites:

A guide assembly for a bone engaging element, comprising (see, e.g., Appellant's specification at Abstract):

a guide configured to guide movement of the bone engaging element (see, e.g., Appellant's specification at page 18, lines 7-10), said guide having a bore through which said bone engaging element may be advanced (see, e.g., Appellant's specification at page 18, lines 7-10), and said bore defining a first longitudinal axis (see, e.g., Appellant's specification at page 18, lines 7-10); and

a support apparatus configured to support said guide, said support apparatus including (see, e.g., Appellant's specification at page 13, lines 26-28 and FIG. 8);

a body mountable to a bone (see, e.g., Appellant's specification at page 13, lines 26-28 and FIG. 8);

a first support member extending from said body (see, e.g., Appellant's specification at page 14, lines 3-5 and FIG. 8); and

a position adjustment assembly supported on said first support member (see, e.g., Appellant's specification at page 14, lines 12-13 and FIG. 8), said position adjustment assembly including (i) a first gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a second longitudinal axis (See, e.g. Appellant's specification at page 16, lines 5-7 and FIG. 10), (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said second longitudinal axis (See, e.g. Appellant's specification at page 16, lines 14-15 and FIG. 10), (iii) a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a third longitudinal

axis (See, e.g. Appellant's specification at page 17, lines 6-8 and FIG. 10), (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said third longitudinal axis (See, e.g. Appellant's specification at page 17, lines 9-11 and FIG. 10), and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said body along said first longitudinal axis (See, e.g. Appellant's specification at page 17, lines 15-18 and FIG. 10),

wherein said first longitudinal axis is not coincident with said second longitudinal axis (See, e.g. Appellant's specification at FIG. 10),

wherein said first longitudinal axis is not coincident with said third longitudinal axis (See, e.g. Appellant's specification at FIG. 10), and

wherein said second longitudinal axis is not coincident with said third longitudinal axis (See, e.g. Appellant's specification at FIG. 10).

Claim 45 recites:

A guide assembly for a bone engaging element, comprising (see, e.g., Appellant's specification at Abstract):

a guide configured to guide movement of the bone engaging element along a first longitudinal axis (see, e.g., Appellant's specification at page 18, lines 7-10); and

a support apparatus configured to support said guide, said support apparatus including (see, e.g., Appellant's specification at page 13, lines 26-28 and FIG. 8);

a body mountable to a bone (see, e.g., Appellant's specification at page 13, lines 26-28 and FIG. 8);

a first support member extending from said body (see, e.g., Appellant's specification at page 14, lines 3-5 and FIG. 8); and

a position adjustment assembly supported on said first support member(see, e.g., Appellant's specification at page 14, lines 12-13 and FIG. 8), said position adjustment assembly including (i) a first gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a second longitudinal axis (See, e.g. Appellant's specification at page 16, lines 5-7 and FIG. 10), (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said second longitudinal axis (See, e.g. Appellant's specification at page 16, lines 14-15 and FIG. 10), (iii) a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a third longitudinal axis (See, e.g. Appellant's specification at page 17, lines 6-8 and FIG. 10), (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said third longitudinal axis (See, e.g. Appellant's specification at page 17, lines 9-11 and FIG. 10), and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said body along said first longitudinal axis (See, e.g. Appellant's specification at page 17, lines 15-18 and FIG. 10),

wherein said first longitudinal axis is not coincident with said second longitudinal axis (See, e.g. Appellant's specification at FIG. 10),

wherein said first longitudinal axis is not coincident with said third longitudinal axis (See, e.g. Appellant's specification at FIG. 10), and

wherein said second longitudinal axis is not coincident with said third longitudinal axis (See, e.g. Appellant's specification at FIG. 10).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 30-49 stand rejected as being anticipated under 35 U.S.C. §102(b) by U.S. Patent No. 5,228,459 to Caspari et al. (hereinafter "Caspari").

(7) ARGUMENT

Claims 30-49 Are Not Anticipated by Caspari

Claims 30-49 stand rejected under 35 U.S.C. §102(b) as being anticipated by Caspari. (Office Action at page 3). Caspari does not teach or disclose each element of the claims. Therefore, the rejections should be overturned.

Discussion re: Patentability of Claim 30

1. Claim 30

Claim 30 recites the following:

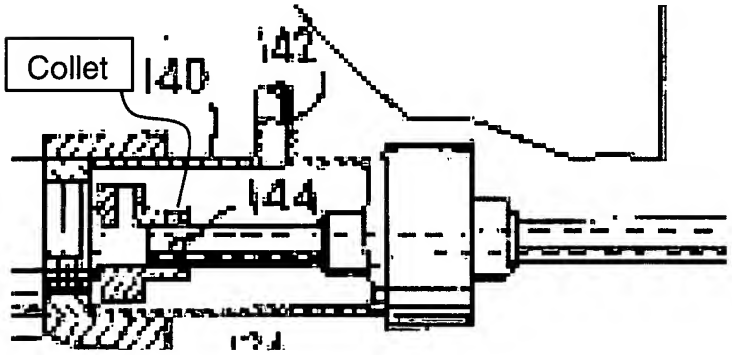
> A system for accurately guiding placement of a bone engaging element in a bone comprising:
>
> a guide configured to guide movement of the bone engaging element toward a location on a bone, said guide having a bore through which said bone engaging element may be advanced, and said bore defining a first longitudinal axis; and
>
> a support apparatus configured to support said guide, said support apparatus including;
>
> a support body mountable to the bone;
>
> an arm extending from said support body; and
>
> a position adjustment assembly supported on said arm, said position adjustment assembly including (i) a first gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said support body along a second longitudinal axis, (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said support body along said second longitudinal axis, (iii) a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said support body along a third longitudinal axis, (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said support body along said third longitudinal axis, and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said support body along said first longitudinal axis,
>
> wherein said first longitudinal axis is not coincident with said second longitudinal axis,
>
> wherein said first longitudinal axis is not coincident with said third longitudinal axis, and
>
> wherein said second longitudinal axis is not coincident with said third longitudinal axis.

Accordingly, claim 30 recites a guide with a bore through which a bone engaging element may be advanced and a mechanism which adjusts the guide along a longitudinal axis defined by the bore.

2. Caspari Has Been Mischaracterized

The Examiner has alleged that Caspari discloses a guide with a bore through which a bone engaging element may be advanced. (Office Action at page 3). The Examiner has mischaracterized Caspari.

Specifically, the Examiner alleges that the chamber 140 of Caspari is a "pin guide" while the port 142 is a "bore" through which a bone engaging element advances. (Office Action at page 3). As shown in FIG. 8, a portion of which is set forth below, the chamber 140 houses a collet which receives a milling cutter 138. (Caspari at column 5, lines 42-45, FIG. 8).



Thus, the Examiner has apparently correlated the "bone engaging element" with the milling cutter 138 of Caspari. As evidenced by FIG. 8 of Caspari, the chamber 140 is not a guide at all for the milling cutter 138. Rather, the chamber 140 is merely a housing within which the collet is positioned. To the extent anything within the chamber 140

"guides" the milling cutter 138, such component would be the collet, not the chamber 140.

Moreover, contrary to the allegation of the Examiner, the milling cutter 138 is not guided by or advanced within the bore 142. As explained by Caspari, the "chamber 140 is formed around the drive coupling and has a port 142 for connection to a source of suction." Thus, *fluid* passes through the port 142, not the milling cutter 138. The fluid which is sucked away from the chamber 140 is not the same as a bone engaging element.

Furthermore, as clearly evidenced by FIG. 8, the bore 142 positioned with respect to the chamber 140 to define an axis extending upwardly and downwardly from the perspective of FIG. 8. The milling cutter 138, however, defines an axis that extends to the left and to the right from the perspective of FIG. 8. Accordingly, the milling cutter 138 cannot be positioned within, much less advanced through, the bore 142.

Additionally, the claim language is clearly directed to system for accurately guiding placement of a bone engaging element in a bone. To this end, the claim recites a bore "through which" the bone engaging element is "advanced". Thus, the device is configured such that the bone engagement element engages the bone after passing through the bore. In contrast, the fluid which is sucked from the chamber 140 enters the bore 142 *after leaving* the bone. (See, e.g., Caspari at column 7, lines 18-21, "[d]uring the resecting procedure, suction is applied to port 142 such that bone chips are evacuated via holes 154 and passage 160 through the hollow milling cutter.").

Therefore, because a chamber for containing fluid is not the same as a guide for a bone engaging element and because a bore configured to suck fluid away from a chamber is not the same as a bore configured for advancement of a bone engaging element into a

bone, the chamber 140 is not a "guide" and a suction tube is not a bore through which a bone engaging device is advanced into a bone as recited in claim 30.

3. Caspari Does Not Disclose a Third Mechanism as Claimed

The Examiner has alleged that Caspari discloses a mechanism for adjusting the guide along the "first longitudinal axis." (Office Action at page 3). The Examiner has mischaracterized Caspari.

Specifically, the Examiner alleges that the movement of the rod 46 within the tube 48 of Caspari is an adjustment mechanism that provides movement along the axis defined by the port 142. (Office Action at page 3). As recited in the claim, the axis along which the third mechanism adjusts the guide is the *same* axis along which the bone contacting element is advanced when engaging a bone with the bone contacting element. Movement of a component along the axis defined by the suction tube port 142 does not bring the component into contact with a bone since the axis of the tube 48 is parallel to the bone (see, e.g., FIG. 3 of Caspari). Therefore, while the port 142 defines an axis, such axis does not include the limitations of the first axis recited in claim 30.

Accordingly, because the axis along which the rod and tube of Caspari moves the pin guide 140 does not have the same characteristics as the axis along which the third mechanism of claim 30 moves the guide, the rod and tube of Caspari cannot be a third mechanism as recited in claim 30.

4. Conclusion

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Caspari does not disclose a guide including a bore through which a bone engaging element is advanced as recited in Appellant's claim 30, Caspari does not anticipate Appellant's claim 30. Likewise, because Caspari does not disclose a third mechanism as recited in claim 30, Caspari does not anticipate Appellant's claim 30. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 30.

Discussion re: Patentability of Claims 31-44

Claims 31-36 depend, either directly or by way of an intermediate claim, from claim 30 and incorporate all the limitations of claim 30. Accordingly, claims 31-36 are patentable over the prior art for at least the same reasons as those set forth above in connection with claim 30.

Claim 37 is an independent claim which recites limitations which, for purposes of this appeal, are the same as the limitations discussed above with respect to claim 30. Claims 38-44 depend, either directly or by way of an intermediate claim, from claim 37 and incorporate all of the limitations of claim 37. Therefore, for at least the same reasons set forth above with respect to the patentability of claim 30 over Caspari, claims 37-44 are patentable over Caspari.

Accordingly, the Board of Appeals is respectfully requested to reverse the rejections of claims 31-44.

Discussion re: Patentability of Claims 45-49

Claim 45 is an independent claim which recites "a guide configured to guide movement of the bone engaging element along a first longitudinal axis" and "a third adjustment mechanism configured to permit adjustment of said guide in relation to said body along said first longitudinal axis." Claim 45 thus recites a guide which guides movement of a bone engaging element along a first axis and a "third mechanism" which adjusts the guide along the *same* axis. The Examiner rejected claim 45 based upon the same components discussed above with respect to claim 30. (Office Action at page 3). Therefore, because the axis along which the rod and tube of Caspari moves the pin guide 140 is not the same as the axis along which a bone engaging element is moved as discussed above with respect to claim 30, the rod and tube of Caspari cannot be a third mechanism as recited in claim 45. Accordingly, claim 45 is patentable over the prior art for reasons similar to those set forth above in connection with claim 30.

Claims 46-49 depend, either directly or by way of an intermediate claim, from claim 45 and incorporate all of the limitations of claim 45. Therefore, for at least the same reasons set forth above with respect to the patentability of claim 45 over Caspari, claims 46-49 are patentable over Caspari.

Accordingly, the Board of Appeals is respectfully requested to reverse the rejections of claims 45-49.

CONCLUSION

Claims 30-49 are not anticipated by Caspari. Accordingly, the Board of Appeals is respectfully requested to reverse the rejections of claims 30-49.

Respectfully submitted,

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(8) CLAIMS APPENDIX

Claim 30. A system for accurately guiding placement of a bone engaging element in a bone comprising:

a guide configured to guide movement of the bone engaging element toward a location on a bone, said guide having a bore through which said bone engaging element may be advanced, and said bore defining a first longitudinal axis; and

a support apparatus configured to support said guide, said support apparatus including;

a support body mountable to the bone;

an arm extending from said support body; and

a position adjustment assembly supported on said arm, said position adjustment assembly including (i) a first gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said support body along a second longitudinal axis, (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said support body along said second longitudinal axis, (iii) a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said support body along a third longitudinal axis, (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said support body along said third longitudinal axis, and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said support body along said first longitudinal axis,

wherein said first longitudinal axis is not coincident with said second longitudinal axis,

wherein said first longitudinal axis is not coincident with said third longitudinal axis, and

wherein said second longitudinal axis is not coincident with said third longitudinal axis.

Claim 31. The system of claim 30, wherein said guide is a pin guide and the bone engaging element is a pin configured to be placed in bone.

Claim 32. The system of claim 30, wherein said position adjustment assembly includes:

a first positioning block movably mounted on said arm; and

a second positioning block movably supported on said first positioning block.

Claim 33. The system of claim 32, wherein:

one of said first positioning block and said second positioning block includes a dovetailed recess, and

the other of said first positioning block and said second positioning block includes a dovetailed member positioned within said dovetailed recess.

Claim 34. The system of claim 30, wherein said first fine adjustment mechanism includes:

a rack gear mounted to one of said first positioning block and said second positioning block; and

a thumbwheel gear configured to mesh with said rack gear and mounted to the other of said first positioning block and said second positioning block.

Claim 35. The system of claim 32, wherein said position adjustment assembly further includes:

a first support member extending from said second positioning block;

a third positioning block movably mounted on said first support member; and

a fourth block movably supported on said third positioning block.

Claim 36. The system of claim 35, wherein said position adjustment assembly includes a second support member connected to said fourth positioning block, and wherein said guide is connected to said second support member.

Claim 37. A guide assembly for a bone engaging element, comprising:

a guide configured to guide movement of the bone engaging element, said guide having a bore through which said bone engaging element may be advanced, and said bore defining a first longitudinal axis; and

a support apparatus configured to support said guide, said support apparatus including;

a body mountable to a bone;

a first support member extending from said body; and

a position adjustment assembly supported on said first support member, said position adjustment assembly including (i) a first gross adjustment mechanism configured

to permit gross adjustment of said guide in relation to said body along a second longitudinal axis, (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said second longitudinal axis, (iii) a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a third longitudinal axis, (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said third longitudinal axis, and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said body along said first longitudinal axis,

wherein said first longitudinal axis is not coincident with said second longitudinal axis,

wherein said first longitudinal axis is not coincident with said third longitudinal axis, and

wherein said second longitudinal axis is not coincident with said third longitudinal axis.

Claim 38. The system of claim 37, wherein said position adjustment assembly includes:

a first positioning block movably mounted on said first support member; and

a second positioning block movably supported on said first positioning block.

Claim 39. The system of claim 38, wherein said position adjustment assembly further includes:

a second support member extending from said second positioning block;

a third positioning block movably mounted on said second support member; and

a fourth block movably supported on said third positioning block.

Claim 40. The system of claim 39, wherein:

said position adjustment assembly further includes a third support member connected to said fourth positioning block, and

said guide is connected to said third support member.

Claim 41. The system of claim 37, wherein said first fine adjustment mechanism includes:

a first rack gear mounted to one of said first positioning block and said second positioning block; and

a first thumbwheel gear configured to mesh with said first rack gear and mounted to the other of said first positioning block and said second positioning block.

Claim 42. The system of claim 41, wherein said second fine adjustment mechanism includes:

a second rack gear mounted to one of said third positioning block and said fourth positioning block; and

a second thumbwheel gear configured to mesh with said second rack gear and mounted to the other of said third positioning block and said fourth positioning block.

Claim 43. The system of claim 39, wherein:

one of said first positioning block and said second positioning block includes a first dovetailed recess, and

the other of said first positioning block and said second positioning block includes a first dovetailed member positioned within said first dovetailed recess.

Claim 44. The system of claim 43, wherein:

one of said third positioning block and said fourth positioning block includes a second dovetailed recess, and

the other of said third positioning block and said fourth positioning block includes a second dovetailed member positioned within said second dovetailed recess.

Claim 45. A guide assembly for a bone engaging element, comprising:

a guide configured to guide movement of the bone engaging element along a first longitudinal axis; and

a support apparatus configured to support said guide, said support apparatus including;

a body mountable to a bone;

a first support member extending from said body; and

a position adjustment assembly supported on said first support member, said position adjustment assembly including (i) a first gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a second longitudinal axis, (ii) a first fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said second longitudinal axis, (iii)

a second gross adjustment mechanism configured to permit gross adjustment of said guide in relation to said body along a third longitudinal axis, (iv) a second fine adjustment mechanism configured to permit fine adjustment of said guide in relation to said body along said third longitudinal axis, and (v) a third adjustment mechanism configured to permit adjustment of said guide in relation to said body along said first longitudinal axis,

wherein said first longitudinal axis is not coincident with said second longitudinal axis,

wherein said first longitudinal axis is not coincident with said third longitudinal axis, and

wherein said second longitudinal axis is not coincident with said third longitudinal axis.

Claim 46. The system of claim 45, wherein said position adjustment assembly includes:

a first positioning block movably mounted on said first support member;

a second positioning block movably supported on said first positioning block;

a second support member extending from said second positioning block;

a third positioning block movably mounted on said second support member; and

a fourth block movably supported on said third positioning block.

Claim 47. The system of claim 46, wherein:

said position adjustment assembly further includes a third support member connected to said fourth positioning block, and

said guide is connected to said third support member.

Claim 48. The system of claim 47, wherein:

said first fine adjustment mechanism includes (i) a first rack gear mounted to one of said first positioning block and said second positioning block, and (ii) a first thumbwheel gear configured to mesh with said first rack gear and mounted to the other of said first positioning block and said second positioning block, and

said second fine adjustment mechanism includes (i) a second rack gear mounted to one of said third positioning block and said fourth positioning block, and (ii) a second thumbwheel gear configured to mesh with said second rack gear and mounted to the other of said third positioning block and said fourth positioning block.

Claim 49. The system of claim 48, wherein:

one of said first positioning block and said second positioning block includes a first dovetailed recess,

the other of said first positioning block and said second positioning block includes a first dovetailed member positioned within said first dovetailed recess,

one of said third positioning block and said fourth positioning block includes a second dovetailed recess, and

the other of said third positioning block and said fourth positioning block includes a second dovetailed member positioned within said second dovetailed recess.

(9) EVIDENCE APPENDIX

None.

(10) RELATED PROCEEDINGS APPENDIX

None.